INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/18968

A. CLA	SSIFICATION OF SUBJECT MATTER	10000	
PC(7) : H01L 21/22, 21/38			
US CL : 438/565			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
U.S.: 438/565, 507, 508, 510, 511, 569			
Documentation searched other than williams 1			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST 2.1.4, IEEE XPLORE			
EAST 2.1.4, IEEE XPLORE			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document with in 1:		
X	Citation of document, with indication, where	appropriate, of the relevant passages	Relevant to claim No.
**	US 2003/0157787 A1 (MURTHY et al) 21 Augus and [0040].	t 2003 (21.08.2003), paragraphs [0039]	19-22
x	[[, -] -		
	US 5,532,183 (SUGAWARA) 2 July 1996 (2.07.1996), column 1, lines 55-60; column 3, lines 41-57.		19-22
A	US 5,198,387 (TANG) 30 March 1993 (30.03.199	3)	
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A	US 5,714,415 (OGURO) 3 February 1998 (3.02.19	998).	100
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A	US 6,410,434 (MANI) 25 June 2002 (25.06.2002).		1-25
A	US 6723 621 P1 (CAPPONE + 1) 20 4 11 200 1		1-25
- î	US 6.723,621 B1 (CARDONE et al) 20 April 2004 (20.04.2004).		1-25
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Further	documents are listed in the continuation of Box C.	5	
	ecial categories of cited documents:	See patent family annex.	
1 later by		"T" later document published after the interna and not in conflict with the application bu	tional filing date or priority date
particular n	defining the general state of the art which is not considered to be of elevance	principle or theory underlying the invention	cated to understand the
"B" carlier anol	lastics as a training of the same of the s	"X" document of particular relevance: the claim	
	lication or patent published on or after the international filing date	considered to set of considered	to involve an inventive step
"L" document v	comment which may throw doubts on priority claim(s) or which is cited to		- 1
specified) document of particular rele			med invention cannot be
"O" document n	eferring to an oral disclosure, use, exhibition or other means	considered to involve an inventive step with one or more other such documents, s	
		to a person skilled in, the art	ace communition being onvious
"P" document published prior to the international filing date but later than the "&" document member of the same patent family			ilv
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Date of the actual completion of the international search Date of mailing of the international search			report
12 November 2004 (12.11.2004)		OBMAY 20.05	
Name and mailing address of the ISA/US		Authorized officer	
Mail Stop PCT, Attn: ISA/US		1 × 1 × 1 × 1	to A
Commissioner for Patents P.O. Box 1450		Richard Elms	
Alexandria, Virginia 22313-1450		Telephone No. 571.272.1869	-
Facsimile No. (703)305-3230			400
mn PCT/ISA/2	210 (second sheet) (July 1998)	L	